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ecology and environment, inc.
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International Specialists in the Environment

MEMORANDUM

DATE: August 20, 1998

TO: Erin Busby, START Project Manager, E & E, Taylor, Michigan
Robert Wilson, START Project Manager, E & E, Taylor, Michigan

FROM: Karen T. Dieckhaus, START Chemist, E & E, Taylor, Michigan

THROUGH: Michael L. Dieckhaus, START Assistant Program Manager, E & E, Taylor, Michigan
David Hendren, START Quality Assurance Officer, E & E, Chicago, Illinois

SUBJECT: Total and Reactive Cyanide Data Quality Assurance Review, MichCon Station H, Detroit, Wayne County, Michigan

REFERENCE: Project TDD: S05-9803-016 Analytical TDD: S05-9807-801
Project PAN: 8M1601RAXX Analytical PAN: 8UAA01TAXX

The data quality assurance (QA) review of two soil/waste samples, collected from the MichCon Station H site, is complete. Samples were collected on July 9, 1998, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). Samples were submitted to Texas OilTech Laboratories, Inc., Houston, Texas, for analyses of total and reactive cyanide. The laboratory analyses were performed according to the American Society of Testing and Materials (ASTM) Methods D2036A and C, for determination of total and reactive cyanide concentrations.

Sample Identification

START Identification No.	Laboratory Identification No.
MCHSS-011	12626-01
MCHSS-012	12626-02

Data Qualifications

I. Holding Time: Acceptable

Samples were collected on July 9, 1998, and received by the laboratory on July 15, 1998. Samples were analyzed on July 16, 1998. All analyses were completed within the holding times specified in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01; 14 days for cyanide. Verbal results were received and provided to START Project Managers on July 20, 1998. Hardcopy analytical results and raw data were received on August 13, 1998.

II Calibration

A. Initial Calibration: Acceptable

Percent recoveries (%Rs) for initial calibration standards were within the recommended limits of 85 to 115% for all cyanide.

B. Continuing Calibration: Acceptable

Calibration verification standards were analyzed at the beginning of the analytical run and repeated after every 10 samples for each day of analyses for cyanide.

III. Method Blanks: Acceptable

Calibration blanks were analyzed with the samples, and all cyanide concentrations were below instrument detection limits.

IV Overall Assessment of Data for Use: Acceptable

The overall usefulness of the data is based on the criteria outlined in OSWER Directive 9360.4-01 (April 1990), Data Validation Procedures; Section 3.0, Metallic Inorganic Parameters; and Section 2.7, Quality Assurance Requirements for QA Level II work. Based upon the information provided, the data are acceptable for use as reported.

TEXAS OILTECH LABORATORIES, INC.

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CERTIFICATE OF ANALYSIS

CLIENT:	Ecology & Environmental	**REQUESTED BY:**	Ms Karen T. Dieckhaus
SAMPLE:		**REPORT DATE:**	July 20, 1998
LABORATORY NO:	12626	**PURCHASE ORDER NO:**	505-9807-801

TEST **RESULTS**

Lab No.	*Sample ID.*	*Cyanide Content, ASTM D 2036A, ppm*	*Cyanide Content, ASTM D 2036C, ppm*
12626-01	MCHSS-011C 7/09 12 30	195 0	170 3
12626-02	MCHSS-012C 7/09 12 30	172 0	156 1
12626-02 (Duplicate)	MCHSS-012C 7/09 12 30 (Duplicate)	175.1	161 0
12626-03	Temp Blank	<1 0	<1 0

Respectfully submitted,

Nader M Sorurbakhsh P E
Laboratory Director